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Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

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April 8, 2011

MEMORANDUM

To: Members and Staff, Subcommittee on Communications and Technology

From: Majority Committee Staff

Subject: Hearing on "Using Spectrum to Advance Public Safety, Promote Broadband, Create Jobs, and Reduce the Deficit."

The Subcommittee will hold a hearing Tuesday, April 12, 2011, at 1:30 p.m. in 2123 Rayburn. The title of the hearing is "Using Spectrum to Advance Public Safety, Promote Broadband, Create Jobs, and Reduce the Deficit." One panel of witnesses will testify:

1. The Hon. Slade Gorton, Former U.S. Senator, Member of the 9/11 Commission
2. Deputy Chief Charles Dowd, Commanding Officer, Communications Division, NYPD
3. Coleman Bazelon, Principal, The Brattle Group
4. Mary Dillon, President and CEO, U.S. Cellular
5. Robert Good, Chief Engineer, WGAL-TV
6. Julius Knapp, Chief, Office of Engineering and Technology, FCC
7. Peter Pitsch, Executive Director Communications Policy and Associate General Counsel, Intel Corp.

I. Overview

Spectrum policy will play a critical role in bringing interoperable broadband communications to public safety, in advancing wireless broadband, and in reducing the deficit. A nimble, constructive approach to the next bands of spectrum to be brought to market can help meet all three goals. Auctioning spectrum is one of the most efficient and cost effective ways we can advance broadband deployment. That is one reason this Committee passed the DTV transition legislation six years ago, which simultaneously cleared 24 MHz of spectrum for public safety, provided First Responders with \$1 billion for interoperable communications equipment, and raised close to \$20 billion by auctioning spectrum that is being deployed to provide the

backbone of 4G wireless broadband services. There are a number of spectrum bands that hold the potential to help us meet our goals, but there are tough decisions to be made about how, when, and for what purpose spectrum is put to use.

II. The Need for Additional Spectrum for Wireless Broadband

Everyone agrees that there needs to be additional spectrum for wireless broadband. American consumers have an increasingly insatiable demand for wireless broadband Internet access. Smartphones now comprise more than one-third of all wireless devices sold in a given quarter. App stores, such as Apple's iTunes App Store, Google's Android Marketplace, and Research in Motion's BlackBerry App World, have delivered more than 10 billion apps to wireless consumers. Cisco reports that the amount of data delivered over wireless networks last year was three times the traffic of the entirety of the Internet in 2000. Given these staggering growth figures, it is no surprise that the FCC's National Broadband Plan and the President of the United States are calling for an additional 500 MHz of spectrum to be allocated for wireless broadband use in the next five years.

III. Discussion

There have been a number of suggestions for ways to meet the country's spectrum needs through allocation of additional spectrum resources for flexible use licensing. Detailed below are some of the suggestions.

A. AWS-3

The AWS-3 band (2155-2180 MHz, unpaired) is currently available for auction and has been the subject of considerable debate at the FCC since the original Advanced Wireless Services proceeding in 2006. Among the plans suggested at the FCC are pairing the spectrum with spectrum currently allocated to the Department of Defense in the 1.7 GHz band.

B. 700 MHz D Block

How the FCC and Congress should address the use of the 700 MHz D Block has been of some debate. The DTV legislation authored by this Committee in 2005 required the FCC to auction spectrum in the 700 MHz band, including the D Block, for commercial use. The FCC commenced an auction in 2008 of the spectrum made available by the transition. Most of the spectrum was successfully auctioned. In the process of creating technical and service rules for the spectrum licenses, however, the FCC chose a variety of geographic license and band sizes, and imposed a number of conditions. For example, the FCC mandated that any auction winner of the D Block enter into a public-private partnership with the Public Safety Spectrum Trust (PSST) to produce a network for both public safety and commercial use. No bidder was sufficiently interested in obtaining the spectrum with that condition. Since then, the D Block has sat fallow at the FCC awaiting Commission action to bring it to market. The Congressional Budget Office has said that spectrum is worth approximately \$3 billion.

Recently, there have been a variety of options put forth by legislators, public safety, and industry for how to handle the D Block. Entities like the Public Safety Spectrum Trust and the Major Cities Chiefs Association are proposing, along with Verizon and AT&T, that Congress pass a law to give the D Block directly to the public safety community for free. The public

safety community would then use the spectrum for construction of the nationwide public safety network in combination with the original 24 MHz the DTV legislation cleared for First Responders. It could do so alone or it could partner with commercial entities. Public safety officials could also lease the spectrum to commercial providers for use when it might otherwise go unused, but reclaim priority access in times of emergency.

Opponents argue that public safety officials don't need additional spectrum since they already hold just short of 100 MHz. Rather, they argue that what public safety agencies really need, especially in smaller cities and counties, is money. They say Congress should authorize that some of the proceeds from commercial auction of spectrum, including the D-Block, be used toward construction of a nationwide public safety network on the existing 24 MHz already cleared for public safety by the DTV legislation.

A. Incentive Auctions

Another idea for clearing spectrum is "incentive auctions." Current licensees, such as broadcasters or satellite companies, would be given the opportunity to voluntarily return some or all of their spectrum in exchange for some of the auction proceeds. The FCC's National Broadband Plan raised this issue, specifically noting that congressional action would be required to enable the FCC to conduct such auctions, but others have furthered the debate. While there are few that have outright opposed incentive auctions, there are concerns as to how they could be done with what spectrum. Broadcasters are emphasizing that incentive auctions be truly "voluntary." Broadcasters have also raised concerns about how repacking will be handled once licensees voluntarily auction off their spectrum. Additionally, the President's proposed FY2012 budget calls for an incentive auction of the television broadcast frequencies to clear spectrum for broadband, fund a number of broadband and public safety initiatives, and reduce the deficit.

B. Relocation, Consolidation and Sharing of Government Spectrum

Following a June 2010 memorandum from the President, the National Telecommunications and Information Administration (NTIA) began working with the FCC to identify government spectrum resources that could be consolidated or relocated to make spectrum available for commercial use. In October 2010, NTIA released two documents detailing their findings. The first, NTIA's "near term" plans, detail the availability of 115 MHz of government spectrum that can be made available for commercial use in the next five years. These "fast tracked" bands are:

- 1675-1710 MHz (currently used by NOAA for weather satellites);
- 3500-3650 MHz (currently used by a variety of federal government users);
- 4200-4220; 4380-440 MHz (currently used for radio altimeters, requires international coordination); and,
- 1755-1780 MHz (currently used by the Department of Defense).

Additionally, NTIA produced a second document detailing the long-term plans for government spectrum use. The "long-term" plans are:

- Repurpose for broadband use over 2200 megahertz of Federal and non-Federal spectrum;

- Follow an aggressive timetable to make available 500 megahertz of spectrum through government coordination; and,
- Call for new incentives, including funding agencies for all planning expenses necessary to develop alternatives for legacy assignments of spectrum and provisioning a portion of the proceeds from spectrum auction to purchase new equipment.

If you need more information, please call Neil Fried or David Redl at 5-2927.